Eyes Everywhere: Amazon's Surveillance Infrastructure and Revitalizing Worker Power

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In the age of Big Data, our lives are under constant surveillance. Tech giants, termed “surveillance capitalists” by author and Harvard Business School professor Shoshana Zuboff,1 track our every move: our physical locations, which websites we visit, what we purchase, our social connections, what we read, our health stats—the list is endless. We are tracked as consumers, as companies use surveillance to hypertarget us with ads; we are tracked as businesspeople, as dominant companies use their control of infrastructure to peek inside businesses and gather competitively advantageous data; and we are tracked as citizens, as police departments and government agencies monitor Americans under the guise of protection. But a form of surveillance that has received less attention—and that remains deeply opaque—is the way we are tracked as workers, as employers leverage new technologies to increase their power and control over their employees.

Employer surveillance of workers is nothing new. Even requiring workers to punch a timecard is a form of surveillance. But employers are increasingly finding new ways to watch over their workers, aided by developments in technology. And the methods that corporations are using are growing more and more invasive, often denying the basic humanity of employees. COVID-19 has accelerated the surveillance of workers, as it caused a shift to remote working for a large number of employees and a desire to track workers wherever they may be. But when the pandemic finally passes, the technologies that surveil workers will likely be here to stay.

Today, workers of all kinds endure the adverse effects of pervasive and constant employer surveillance that monitors and controls their working day. Employees often must accept how their employer chooses to surveil them and typically do not have any input to limit how their employer uses these technologies.2

Significant advances in technology have greatly expanded the capability, severity, methodology, frequency, and precision of employer surveillance.3 Employers have even become interested in the most mundane behaviors of their workers, such as the length of their smoking and food breaks, to evaluate their overall productivity.4

Sophisticated surveillance technologies have only exacerbated the power gap between employer and employee. In conjunction with the steep decline in
unionization in the United States since the 1950s, employees have even less bargaining power to protect their interests. Workers lack bargaining power to sufficiently fight invasive forms of surveillance, and surveillance is even being used to deter and prevent unionization.

Leading the troubling trend of worker surveillance is one of the world’s most powerful companies: Amazon. Amazon is the dominant online retailer in the United States, accounting for almost one out of every two dollars spent online. Beyond e-commerce, Amazon also maintains a commanding presence in many other markets spanning voice assistants, digital books, smart doorbells, and cloud computing.

But make no mistake about it—Amazon is first and foremost a surveillance company. Data collection is the core of its business model, no matter what the business line. Amazon surveils consumers, competitors, citizens, and immigrants, and it invasively and ubiquitously surveils its employees.

Amazon employed approximately 840,000 people as of April 2020, so its practices have widespread impact. And the tech platform’s surveillance operations now serve as a model for other corporations, which seek to adopt similar technologies to try to stave off Amazon or to emulate its continual expansion of market shares.

Reports indicate that Amazon’s relationship with many of its employees consists of control, humiliation, and unabating anxiety. Employees have described Amazon as creating a “‘Lord Of The Flies’-esque environment where the perceived weakest links are culled every year.” Other employees have described that Amazon treats its workers like “zombies” and “robots,” ordered to work at a relentless pace and in the specific manner that Amazon requires its tasks to be completed.

In this paper, we discuss the various methods and tactics that Amazon implements to surveil its workers and how these surveillance operations harm them. We also detail how surveillance is tied to employer power over workers and how surveillance exacerbates the inherently unequal dynamics among corporations and their employees. Furthermore, we propose several solutions to reduce surveillance practices and their consequences, as well as reduce the market power that facilitates surveillance and limits employees’ job opportunities and bargaining power.

Worker surveillance is almost wholly unregulated and opaque, and thus requires further study to refine the potential solution set. But regulating surveillance,
increasing worker power, and reducing overall corporate power is a starting point. We propose:

- Invasive forms of worker surveillance should be prohibited outright, with employers bearing the burden of obtaining approval from state and federal agencies for noninvasive tracking measures that do not harm worker welfare.

- The NLRB should promulgate a rule prohibiting forms of surveillance that presumptively interfere with unionization efforts.

- Congress should permit independent contractors to unionize.

- Congress should legalize secondary boycotts and other solidarity actions.

- The FTC and DOJ should amend the merger guidelines to enact bright-line enforcement rules.

- The FTC should ban noncompete agreements and class action waivers.
This report examines Amazon’s surveillance operations as a troubling example of the broader conduct taking place in the American economy, conduct that is the byproduct of years of consolidation of corporate power and the simultaneous decline of worker power. Gaps in our laws have allowed employers to implement a vast range of surveillance technologies with few legal repercussions. Shoshana Zuboff has stated that the workplace is “where invasive technologies are normalized among captive populations of employees.”

Studying and understanding the degree of power exerted over workers has direct implications for how these technologies can be used by corporations or even the government over the population at large.

To be sure, employers may have legitimate purposes for keeping track of their employees, such as measuring performance to reward with bonuses or raises those who excel. But surveillance significantly affects how employees engage with their work and behave in the workplace; the phenomenon is so well documented that it has a name: the Hawthorne Effect. Among the psychological effects is the distrust often created between workers and employers because of the implied condition that employers are surveilling employees because employers suspect that employees might be engaged in nefarious behavior. Workers may not be able or even desire to build relationships with each other, out of fear that they are not performing in the most efficient and productive way. Due to increased stress and anxiety, surveillance can also reduce worker productivity and increase their probability of injuring themselves, as workers will skip needed breaks when they know their employer is monitoring them.

Beyond the psychological effects, this growing trend among American corporations causes several other severe harms to workers, their safety, and their ability to advocate for better working conditions. Such invasive techniques risk being used by employers to limit worker freedom, ensure full compliance with employer-demanded standards, squeeze every ounce of efficiency out of a worker, as well as deter, interfere with, and ultimately chill collective worker action.

Henry Ford hired Harry Bennett to run the Ford Service Department to deter and mitigate—in many cases with physical force—any efforts to unionize. However, now that the modern workplace substantially relies on email, computers, internet access, and the use of other electronic devices,
the ability of employers to surveil their employees has never been easier, more imperceptible, or more invasive. And workers endure the adverse effects of surveillance, with little recourse.\textsuperscript{21}

Critics note that opting out of surveillance today is as difficult as opting out of “electricity, or cooked foods,”\textsuperscript{22} and the workplace has turned into a digital panopticon.\textsuperscript{23} Between 2015 and 2018, 50\% of 239 companies surveyed used some form of employee surveillance, according to a 2019 survey by Gartner.\textsuperscript{24} This number was expected to increase to 80\% in 2020.\textsuperscript{25} Corporate practices have gotten so invasive that one of America’s leading security experts, Bruce Schneier, stated that employers are “the most dangerous power that has us under surveillance.”\textsuperscript{26}

No employee is immune to expanding corporate surveillance. A range of software products captures an employee’s screen and keystrokes, which are used by employers to determine the worker’s overall “intensity score.”\textsuperscript{27} Sales for this type of software have surged since the onset of the COVID-19 pandemic.\textsuperscript{28} Two prominent software companies saw their surveillance software sales spike 500\% and 600\% between March and June of this year.\textsuperscript{29}

Although most employees understand that their employers are tracking them, they often lack insight into how invasive these applications are and how their employers use the collected information. Surveillance company CEOs are clear about which aspects of an employee’s day are monitored by their software. Sam Naficy, the CEO of Prodoscore, which produces surveillance software installed on employees’ computers, simply stated, “All of it is recorded.”\textsuperscript{30} Other surveillance programs can be used by employers to judge a worker’s performance. For example, software by Microsoft allows employers to know how much time an employee spends emailing or in meetings.\textsuperscript{31} All calls can be digitally recorded and reviewed to judge for a worker’s quality, tone, and engagement.\textsuperscript{32}

The employer-employee relationship inherently favors the employer.\textsuperscript{33} Employees are typically dependent on their labor to produce their income. Employers, on the other hand, can leverage their customer base as well as the financial size and geographic scale of their operations to mitigate the risk that any one employee can pose to the company and its operations. Furthermore, employers can impose, as a condition of employment, other restrictive practices that impede labor mobility, increase employer control, and weaken an employee’s workplace rights. For example, noncompete agreements and mandatory arbitration clauses restrict employees’ ability to seek other, potentially better employment, and prevent employees from using a public judicial forum to redress their grievances.\textsuperscript{34}
A troubling trend has emerged during the past decade, as employers have extended their surveillance beyond what any employer could reasonably justify—and Amazon is the quintessential offender. Amazon has adopted worker surveillance technologies in nearly every aspect of its operations, creating exceptionally oppressive conditions for its workers.

Giving homage to Brad Stone’s famed description of Amazon as “The Everything Store,” OneZero journalist William Oremus has said that, thanks to its relentless surveillance, Amazon should be called “The Everywhere Store.” Amazon’s recent surveillance efforts indicate that the corporation is eager to live up to this title. In June 2019, Amazon patented its “surveillance as a service” system, which will use its fleet of delivery drones to monitor the homes of its users to check for break-ins and package theft.

“It makes me afraid, mentally and physically exhausted,” Hibaq Mohamed, who works as a stower at an Amazon warehouse in Minneapolis, told us of the constant monitoring on the job. Mohamed, who is a worker-leader with the Awood Center, shared with us her experiences with the Amazon surveillance tactics detailed in this report.

In this paper, we discuss the methods and tactics that Amazon uses to surveil its workers, and how these surveillance operations harm them. We also explain how surveillance exacerbates the inherently unequal dynamic among employers and workers. Among many adverse effects, surveillance enhances corporate power by endangering worker health and well-being, intensifies precarity, provides corporations with the ability to block unionization, and is at risk of even more widespread adoption and normalization. Finally, we propose measures to begin to rebalance power away from dominant employers and back to employees, with the goal of ultimately reducing surveillance practices and their consequences.
II. Amazon’s Worker Surveillance Infrastructure

Employer surveillance is not a new phenomenon, but, due to the increasing sophistication of technology, the desire for increased control over workers, and declining costs, worker surveillance has begun to intensify. Among other things, surveillance can be used by employers to standardize tasks, automate jobs, and make rigid an employee’s work. Although not all worker surveillance adversely affects workers or degrades their working conditions, employers have consistently incorporated ever more invasive means to track their employees, to obtain unprecedented insight into employee behavior.

Amazon uses its surveillance infrastructure to control and monitor the output and behavior of its employees. Upon entering the warehouse, Amazon requires workers to dispose of all of their personal belongings except a water bottle and a clear plastic bag of cash. During the workday, Amazon surveils warehouse employees with an extensive network of security cameras that tracks and monitors a worker’s every move.

Amazon installs numerous surveillance cameras in its warehouses in part to prevent and deter theft. However, Amazon uses the recorded footage to display—on large television sets visible to many employees in the warehouse—former employees who were caught stealing and whom Amazon subsequently terminated or arrested. Veterans of the security industry are even astonished by the extent of Amazon’s practices. One retail security veteran stated he had “never heard of anything” quite like Amazon’s practices.

Amazon has also recently integrated its security cameras with sophisticated artificial intelligence to monitor and track employee movements. These cameras, called Distance Assistants, are to ensure that employees are complying with social distancing requirements during the COVID-19 pandemic.

At the end of their workday, warehouse employees are thoroughly screened to ensure that they did not steal any items from Amazon’s warehouses. For many workers, the time spent in these mandatory screenings is not compensated and requires waiting times that can range from 25 minutes to an hour.

Amazon has also set up vast surveillance operations to ensure that every aspect of a worker’s tasks is optimized, so the corporation can extract as much labor from workers as possible.
Using item scanners, Amazon sends out orders to its workers to complete a task, such as retrieving an item to be packaged and sent to a customer. However, Amazon’s item scanners also count the number of seconds between each task assigned to the worker. When employees fall behind Amazon’s chosen productivity rate (e.g., packages processed per hour), software in the scanners reprimands the employees who spend too much “time off task” (TOT)—including issuing warnings and even terminating the employee.

Amazon’s surveillance of its workers extends outside its warehouses, as well. Navigation software, called the Rabbit or Dora, is used to recommend and monitor routes for delivery drivers (even though in many cases they are independent contractors). The software tracks a worker’s location, to ensure that the driver always takes the route chosen by Amazon. Amazon programs the software to minimize worker freedom and individual decision-making. For example, the software only factors in 30 minutes for lunch and two separate 15-minute breaks during the day. Amazon further demands that employees deliver 999 out of every 1,000 packages on time or face termination. Amazon’s surveillance thus drives not only which tasks are completed by workers, but the manner and rate in which they are completed.

Amazon has vast ambitions to expand its surveillance and control over its workers. Amazon patented a wristband that “can precisely track where warehouse employees are placing their hands and use vibrations to nudge them in a different direction.” The patent states that “ultrasonic tracking of a worker’s hands may be used to monitor performance of assigned tasks.”
III. How Surveillance Harms and Controls Workers

Amazon’s surveillance infrastructure has a wide range of adverse effects on its workers. Amazon’s surveillance practices endanger workers’ mental and physical health, increase precarity, deter unionization efforts—and yet might well be normalized and adopted widely.

A. ENDANGERING WORKERS’ MENTAL AND PHYSICAL HEALTH

Amazon’s relationship with its employees consists of control, humiliation, and unabating anxiety, according to reports. Employees have described Amazon as creating a “‘Lord Of The Flies’-esque environment where the perceived weakest links are culled every year.”

Amazon’s workers are under constant stress to make their quotas for collecting and organizing hundreds of packages per hour. Amazon monitors an employee’s time off task, or TOT (i.e., the time spent not completing the task assigned by the worker’s item scanner), and will automatically terminate the employee for making merely a few missteps.

For employees, the TOT scanners create the psychological effect of a constant “low-grade panic” to work. In this sense, workers are dehumanizingly treated by Amazon as if they are robots—persistently asked to accomplish task after task at an unforgiving rate. Put another way, workers say that this degree of control turns them into “zombies” when they enter the Amazon facility and start their shifts.

Mohamed explained to us that she and her colleagues are routinely evaluated for performance on the basis of hitting their “rate” of packing, stowing, or picking, based on their particular role. But, she said, “We don’t know what the rate is—they change it behind the scenes. You’ll know when you get a warning. They don’t tell you what rate you have to hit at the beginning.”

The resulting pressure and anxiety do not cease when the workday ends. Hibaq explained: “I feel—and a lot of workers, they feel, even when they’re sleeping—that they’re docking to try and hit their rate. Because they’re worried about next week what’s going to happen; you don’t know what’s going to happen. I don’t
know what I finished this week. Next week if I hit the rate, if the rate will change. And managers are watching you and coming to you all the time. You feel like someone is watching you while you are sleeping.”

Amazon employees feel forced to work through the pain and injuries they incur on the job, as Amazon routinely fires employees who fall behind their quotas, without taking such injuries into account. An investigation of Amazon’s workplace injuries by the Center for Investigative Reporting found that Amazon’s rate of severe injuries in its warehouses is, in some cases, more than five times the industry average. Amazon’s surveillance capabilities allow the corporation to extract every ounce of productivity from their workers, increasing the probability of worker injuries. A former safety manager, who works at a third-party service to deliver medical services at Amazon’s warehouses, said that “If [workers] had an injury … there was no leniency; you were expected to keep that rate.”

One employee remarked that she “wasn’t prepared for how exhausting working at Amazon would be.” In describing the pain she experienced trying to meet Amazon’s demanding work pace, the employee said, “It took my body two weeks to adjust to the agony of walking 15 miles a day and doing hundreds of squats. But as the physical stress got more manageable, the mental stress of being held to the productivity standards of a robot became an even bigger problem.”

Mental health problems are pervasive among workers. Among 46 warehouses in 17 states, 189 calls for emergency services were made between 2013 and 2018 for a variety of mental health incidents, including suicide attempts, suicidal thoughts, and other mental health episodes.

The rate of workplace injuries is so egregious in Amazon’s warehouses that the National Council for Occupational Safety and Health in 2018 listed Amazon as one of the “dirty dozen” on its list of the most dangerous places to work in the United States.

Amazon’s technological surveillance enables and reinforces the relentless physical surveillance by managers. “Managers are always hovering around,” said Hibaq. “They feel comfortable physically harassing people; that’s a regular thing … The workers who speak up, they feel threatened physically and mentally.”

Physical monitoring by managers can infantilize workers. Recounting her communications with managers, Hibaq said, “I was telling them, ‘I’m not a baby, you’re not babysitting me,’ many times. ‘Why are you surrounding me? Why are you surrounding me? I’m a grown person, I know what to do.’ And the managers don’t even introduce themselves, they just keep watching and surrounding.”
Amazon’s surveillance is also used to enforce the corporation’s rigorous employee performance standards outside the physical premises of its warehouses. Delivery drivers often speed to meet Amazon’s rigorous delivery demands, harming both drivers and bystanders. Investigations conducted by ProPublica and BuzzFeed discovered that Amazon delivery drivers had been involved in more than 60 crashes that led to serious injuries, including at least 13 deaths, between 2015 and 2019.

B. INTENSIFYING WORKER PRECARITY

Amazon routinely uses its surveillance infrastructure to determine whether employees are falling below its rigorous work demands. Often employee terminations are delivered electronically, dehumanizing the process. Amazon’s electronic system analyzes an employee’s electronic record and, after falling below productivity measures, “automatically generates any warnings or terminations regarding quality or productivity without input from supervisors.”

Amazon’s practices exacerbate the inequality between employees and management by keeping employees in a constant state of precariousness, with the threat of being fired for even the slightest deviation, which ensures full compliance with employer-demanded standards and limits worker freedom.

C. INTERFERING WITH WORKER ORGANIZING

Amazon’s surveillance infrastructure also plays a vital role in the corporation’s union-busting activities to prevent workers from collective organization to advocate for safer working conditions, as well as for increased pay and benefits.

Amazon has a long history of union busting, and its surveillance infrastructure has enhanced its ability to prevent worker organizing. For example, Amazon analyzes more than two dozen internal and external variables from data collected from a variety of sources, including the percentage of families below the poverty line, a “diversity index,” and team member sentiment, to determine which Whole Foods stores are at a higher risk of unionizing. Amazon used its collected data to create a heat map, indicating to management the stores that were at a higher risk of unionizing. Amazon has fiercely fought against unions and has provided an anti-union training video to members of its management team.

Surveillance also provides Amazon a means to proactively prevent workers from organizing, because the corporation is always tracking where its workers are located. Mohamed told us: “When they want to know something, the management, they use that camera. When we’re organizing, when there was...
a slowdown of work before the pandemic in my area or my department, then we [workers] would come together and talk. But [the camera] is how they can come so quickly and spread workers out.”

Mohamed said that the corporation uses its surveillance infrastructure to move around employees whom management suspect of collectively organizing. “They spread the workers out,” said Mohamed, adding that “you cannot talk to your colleagues … The managers come to you and say they’ll send you to a different station.”

COVID-19 has given Amazon another means to suppress labor organizing: social distancing, Mohamed said. “They created a new policy of keeping six feet apart, and you get a warning if you don’t do it. But managers, they are not getting it, they are not doing it. The only people that they’re giving warnings to are organizing leaders … They are taking this as an opportunity to fire workers.” She added, “They punish workers for not social distancing, [but] the managers are coming close all the time.”

“There’s retaliation for only the organizers,” said Mohamed.

D. INCREASING RISK OF THE SPREAD AND NORMALIZATION OF SURVEILLANCE

Amazon’s practices have been widely adopted, particularly by Walmart, the corporation’s primary—and only significant—rival.

Walmart has purchased facial recognition software to identify workers and customers in its stores and monitor their productivity, location, and purchases.75 Like Amazon, Walmart has also sought to patent new surveillance technology: a microphone system to eavesdrop on its workers and shoppers, for example.76 While not yet implemented to our knowledge, the patent application states, “A need exists for ways to capture the sounds resulting from people in the shopping facility and determine performance of employees based on those sounds.”77 The system would be embedded near the cashier, to listen to every beep, noise, and conversation to extract and analyze various performance measures from the employee and the customer.78 Walmart has also started offering one-day free shipping on many of its products, to compete with Amazon.79 Such practices will almost certainly lead to the same harmful effects that plague Amazon workers.
IV. Solutions

We propose a series of solutions that can begin to give workers the power to help determine their working conditions and ensure their unfettered right to privacy and the right to organize. We also believe these solutions can establish a fair marketplace in which no firm or small set of firms are dominant.

A. PROHIBIT DANGEROUS, INVASIVE, AND OPPRESSIVE FORMS OF WORKER SURVEILLANCE

i. Employers’ Invasive Surveillance Practices Should Be Prohibited

As we show in our report, dominant employers such as Amazon continue to implement ever more invasive means to surveil their employees. Employers should face a heavy regulatory burden to implement worker surveillance. Unless substantial evidence proves otherwise, the presumption should be that surveillance interferes with a worker’s right to privacy, right to mental and physical health, and right to organize.

Congress and state legislatures should enact legislation that requires employers to disclose, in plain and ordinary language, the surveillance practices they either use or intend to use to surveil their employees. The legislation should also require corporations to disclose and justify each of their surveillance practices to state and federal agencies. State and federal agencies should then be required to approve the surveillance practices that an employer seeks to implement.

An employer’s disclosures should include: which information is being collected by the corporation’s surveillance practices; how long the employer retains the information; the reasons for each surveillance practice; any adverse mental and physical health effects the surveillance practice has on workers; how the information collected is used by the employer or potential third parties; whether the employer shares the information with any third parties; and, if the employer is sharing the information, which third parties have access to the collected information.80

Requiring employers to disclose their surveillance practices to state and federal agencies provides several key benefits. First, disclosures to state and federal agencies inhibit employers from unilaterally subjecting their employees to
invasive surveillance practices without public oversight. Second, disclosures provide workers with notice about the surveillance practices they will be subjected to. Disclosures thus allow individuals to determine whether they want to be subject to the types of surveillance that a potential employer uses. Third, public disclosure requirements can deter employers from implementing certain surveillance practices. Fourth, disclosure requirements of surveillance practices can provide information for state and federal agencies to study the practice and determine whether it should be prohibited. For example, the Occupational Safety and Health Act requires all employers to provide employees a workplace that is “free from recognized hazards that are causing or likely to cause death or serious physical harm.” Mandatory disclosures to agencies can aid the Occupational Safety and Health Administration to launch investigations into the adverse health effects of particular workplace surveillance practices, which could lead the agency to limit the practices. Lastly, disclosures ensure that, despite employer efforts to use ever more imaginative means to surveil workers, the public and governmental agencies are aware of these practices and will properly regulate or prohibit the practices as quickly as possible.

Mandatory disclosures can thus help resolve the current disconnect among what the general public and state and federal agencies know about the employers’ surveillance practices, how much these practices deter worker organization efforts, and how much physical and psychological harm these practices cause.

Currently, only Connecticut and Delaware require employers to disclose their surveillance practices to their employees. However, these statutes lack any provision about how the employer uses the information collected by the surveillance. Additionally, these statutes lack any process for employers to disclose their surveillance practices to state or federal agencies.

**ii. The NLRB Should Determine That Specific Employer Surveillance Practices Should Be Prohibited or Presumptively Interfere With Unionization Efforts**

The National Labor Relations Board (NLRB) should use its broad, substantive rule-making authority and adjudicative capabilities to prohibit intrusive surveillance practices in the workplace that have an appreciable risk of interfering or deterring collective worker action. The NLRB should use its rule-making capabilities to prohibit any practices that have been shown to deter worker unionization.

After insufficiently protecting workers’ right to strike and collectively organize, Congress passed the Wagner Act and established the NLRB in 1935.
Wagner Act was enacted by Congress to provide affirmative organizing and collective bargaining rights to workers.87 The act specifically states that employees “shall have the right to self-organization, to form, join, or assist labor organizations, to bargain collectively through representatives of their own choosing, and to engage in other concerted activities for the purposes of collective bargaining or other mutual aid or protection.”88 Importantly, the Wagner Act prohibited employer practices that “interfere with, restrain, or coerce employees” in their efforts to organize and act collectively.89

As we describe, surveillance not only deters workers from organizing, but dominant employers such as Amazon have used their surveillance infrastructure precisely to interfere with and deter collective worker action.90 The NLRB has broad, substantive rule-making authority regarding unfair labor practices that deter unionization.91 While the NLRB has typically depended on adjudication to implement specific policies,92 the Supreme Court has repeatedly affirmed that the NLRB has the rule-making authority to rebalance worker power.93

The agency also has adjudicative authority in the sense that labor relations issues are litigated through the agency’s administrative law judges and, if appealed, by the NLRB. The NLRB has primarily chosen to enact its policy agenda through adjudication.

One example of the NLRB using its litigation authority to limit worker surveillance was in Purple Communications.94 Purple Communications concerned an employer’s communications practices that prohibited the use of email relating to “activities on behalf of organizations or persons with no professional or business affiliation with the company.”95 The complaint alleged that the employer’s practice unlawfully interfered with and restricted employees’ rights to unionize.96

Although the decision was a narrow one,97 the NLRB in its 2014 Purple Communications decision did acknowledge the growing need for unionization efforts to use workplace technology such as email to organize and discuss workplace grievances.98 The NLRB stated that the previous legal analysis of balancing employers’ interests in monitoring communications over the needs and desires of workers to collectively organize was too imbalanced in favor of employers.99 The NLRB then established a presumption that required employers to show a “special circumstance” such that monitoring of email communications was necessary to “maintain production or discipline.”100

The NLRB in 2019 overturned its Purple Communications decision.101 Because the Supreme Court has repeatedly affirmed the ability of agencies to interpret
and reinterpret the meaning of agency regulations and holdings, a future NLRB could reinstate a stronger *Purple Communications* standard.\textsuperscript{102}

A new presidential administration could appoint NLRB members that are more favorable to labor organizing. The new board members could institute strong rules that protect workers from invasive employer surveillance practices. Additionally, new NLRB members can rule, as the board did in *Purple Communications*, that employer surveillance practices, such as email surveillance or pervasive camera surveillance, presumptively interfere with an employee’s right to organize and outweigh an employer’s need to surveil its employees.\textsuperscript{103}

**B. REVITALIZE AMERICAN UNIONIZATION**

The employee-employer work paradigm involves employers being able to terminate employees at will for almost any reason. As long as employers can fire workers for practically any reason—or no reason at all—the power disparity between labor and employers will always favor employers. Fostering unionization is critical to rebalancing power toward workers and to ensuring that workers receive essential benefits such as fair wages, a safe work environment, and equal decision-making over operations and strategy.

Unions also provide a broad range of benefits to workers, including protections against at-will employment. Substantial research has shown that unions reduce income inequality, increase wages, provide better benefits to workers, and rebalance power away from dominant employers to workers.\textsuperscript{104} The proliferation of other restrictive practices such as class action waivers, noncompete agreements, and mandatory arbitration agreements would have likely not occurred if a more substantial union presence existed in the United States.\textsuperscript{105}

Scholars and lawmakers have known and recognized the benefits of unions for almost a century. Chief Justice William Howard Taft remarked in 1921 that unions were “essential” to give laborers an opportunity to deal on equal terms with their employers.\textsuperscript{106}

Unions can prohibit practices that are detrimental to a worker’s safety and interfere with a worker’s right to privacy. In some cases, unions have been able to obtain restrictions on employer surveillance practices.\textsuperscript{107}

To rebalance power toward workers, we propose four solutions that can revitalize unionization in the United States and ultimately restrict and prohibit worker surveillance.
i. Congress Should Permit Independent Contractors to Unionize

Under current law, independent contractors (such as Amazon Flex delivery drivers or warehouse workers) cannot unionize. The rise of the "gig economy" has increased in tandem with the usage of independent contractors by dominant firms, the latter increasing by 20% on average in the United States between 2001 and 2016, as compared to less than 10% for the increase in all employees. Dominant firms such as Amazon now routinely depend on independent contractors.

By enacting the Taft-Hartley Act in 1947, Congress limited the National Labor Relations Act’s protections only to employees. As a result of this decision, Congress pushed corporations to relegate workers to independent contractor status, avoiding the protections that unions provide to employees. Employers who decide to use independent contractors instead of traditional workers effectively sidestep federal labor law.

Allowing independent contractors to unionize would prohibit firms from circumventing labor protections and would give a significant percentage of workers the benefits and protections offered by unions.

ii. Congress Should Legalize Secondary Boycotts and Other Solidarity Actions

One of the signature weaknesses in American labor law is the prohibition against secondary boycotts and other solidarity labor actions. Secondary boycotts allow unions to engage in a strike or other labor action that supports workers in a separate organization. Without secondary boycotts and other solidarity actions, labor protections are limited to only the relationship between an employer and its employees.

While the Wagner Act was a statute meant to pursue “utopian aspirations for a radical restructuring of the workplace,” the Taft-Hartley Act specifically sought to restrict labor practices to narrow how unions can advocate for their workers and how workers can organize or put pressure on their employers to demand better working conditions. The Taft-Hartley Act specifically prohibited secondary and solidarity boycotts. As a result of the act, American unionization rates plummeted.

Prohibiting secondary and solidarity boycotts limits which actions a union can take to pressure employers to treat workers fairly, even across entire economic sectors. Legalizing secondary boycotts and other solidarity actions would allow workers across the economy to organize collectively to win fair treatment, adequate wages, a safe working environment—and protections from excessive surveillance.
C. REIN IN CORPORATE POWER

Sheer power explains much of why dominant firms such as Amazon have been able to implement intrusive surveillance practices. Market power allows firms not only to control markets, but also to exploit their workers, with surveillance just one method to exert dominance.

A substantial body of evidence shows that U.S. markets are significantly more concentrated than in the past. Researchers have found that 75% of all U.S. industries have increased in concentration since the 1990s, with an average increase in concentration of 90%. Moreover, researchers have found that many U.S. markets now suffer from exceedingly high levels of concentration.

Recent scholarly literature has shown a clear connection between market concentration and harm to workers. For example, José Azar, Ioana Marinescu, and Marshall Steinbaum examined more than 8,000 local labor markets and concluded that the average labor market in the U.S. is “highly concentrated.” The researchers said that highly concentrated markets resulted in workers frequently earning less income: In a market that goes from the 25th percentile to the 75th percentile in concentration, wages decline by 17%. Similar studies have found that as market concentration increases in a supply chain, workers’ wages in upstream markets stagnate.

Decreasing the market power of dominant firms is critical to strengthening unions and ensuring their long-term stability. Additionally, more vigorous antitrust enforcement would increase competition for workers, enhancing their overall mobility and demand for their labor. Increased enforcement would also substantially lessen the market power and monopsony power of dominant firms and decrease the ability of employers to impose coercive surveillance practices on their employees.

We propose two recommendations for how antitrust enforcement can be reinvigorated to benefit workers.

i. The FTC and DOJ Should Amend the Merger Guidelines to Enact Bright-Line Enforcement Rules

Dominant firms routinely acquire and entrench market power by taking advantage of permissive merger enforcement. Substantial research has shown the adverse effects of mergers on competition, innovation, workers, and prices.

The Clayton Act, the primary anti-merger law in the United States, features robust and broad language. Section 7 of the act prohibits mergers
that may “substantially ... lessen competition, or ... tend to create a monopoly.” 122 Congress amended the law in 1950 to increase both its reach and enforcement. The 1950 amendments aimed to create a more robust merger enforcement regime to promote local ownership to stem the “rising tide of economic concentration in the American economy.” 123 Soon thereafter, the Supreme Court and antitrust enforcers enacted strong presumptions against mergers that unduly increased concentration. 124 In *United States v. Von's Grocery Co.*, 125 the Supreme Court held in 1966 that a merger between two grocery store chains with a local market share of almost 8% violated the Clayton Act. 126 Soon thereafter, in 1967, the Supreme Court prohibited Procter & Gamble’s acquisition of Clorox. 127 The court reasoned that the acquisition would entrench Clorox’s dominance in household bleach and deprive consumers of the benefit of a competitive market.

The Clayton Act and the subsequent 1950 amendments were a clear and direct policy choice to favor corporate expansion by means other than acquisition, and to establish a vigorous merger enforcement regime. 128 Despite the clear congressional intent, federal agencies have withdrawn from enforcing even the most clearly harmful mergers, such as the recent 4-to-3 merger of T-Mobile and Sprint. The agencies have also chosen not to block other mergers that appear illegal under the statute. 129 Moreover, the agencies have chosen to challenge only a small handful of the more than 700 acquisitions that Google, Apple, Amazon, Facebook, and Microsoft have made since 1987. 130 Amazon, in particular, has made 83 acquisitions between 1998 and 2019—none of which were challenged by federal agencies. Many of Amazon’s mergers have simply bought a significant market share for the corporation. 131

This lackluster enforcement stems from unclear merger enforcement rules that provide the Department of Justice (DOJ) and the FTC with too much discretion on when to enforce the Clayton Act. Additionally, the current enforcement regime forces federal agencies and the courts to make speculative decisions concerning how competitive a market will be in the future.

We propose that the FTC and DOJ amend their merger guidelines to incorporate bright-line rules similar to the 1968 Merger Guidelines, so that if a firm controls 20% of a relevant labor market or product market, any merger involving the company would be illegal.

Before being watered down by the DOJ, the 1968 Merger Guidelines had a similar construction and sought to enact the strong congressional command against mergers from the 1950 Clayton Act amendments. 132

Bright-line rules, such as the ones we propose and that were implemented in the 1968 Merger Guidelines, encourage firms to grow organically instead of
through acquisition. When the Clayton Act was vigorously enforced, between 1948 and 1952, corporations chose to invest in building out their operations rather than in acquiring competitors. 133 During this time, companies spent less than 3% of their total investment dollars on acquisitions. 134 Historical examples have shown that when acquisitions are not pursued, firms invest in innovation. For example, the telecommunications giant AT&T was prohibited from acquiring T-Mobile in 2011. Instead of T-Mobile faltering as a competitor, T-Mobile radically altered the industry’s entire business model by slashing prices and ending long-term consumer contracts.

Establishing bright-line rules also prohibits agencies from engaging in what is called cross-market balancing. Cross-market balancing is when the harm caused by an antitrust violator to one set of economic actors can be offset by the alleged beneficial effects the conduct has in another market with another set of economic actors. The Supreme Court has repeatedly prohibited this practice. 135 In United States v. Philadelphia National Bank, the Supreme Court stated that “a merger the effect of which ‘may be substantially to lessen competition’ is not saved because, on some ultimate reckoning of social or economic debits and credits, it may be deemed beneficial.” 136

Despite this clear ruling, courts still engage in this cost-benefit analysis, and these institutions still try to promote anti-competitive and other exclusionary conduct, based on court opinions that such conduct is healthy for a competitive market. In addition to promoting a vigorous anti-merger enforcement regime in line with congressional intent, bright-line rules would reinforce the agency’s commitment to follow Supreme Court precedent and prohibit cross-market balancing.

**ii. The FTC Should Ban Noncompete Agreements and Class Action Waivers**

The FTC has broad powers granted by its enabling statute, the Federal Trade Commission Act. 137 Section 5 of the act allows the FTC to prohibit unfair or deceptive acts or practices and unfair methods of competition. 138 The FTC also has broad rule-making powers to define the meaning of these terms. The FTC can use its rule-making authority to establish bright-line rules to prohibit some of the most egregious business practices that dominant firms routinely employ to disenfranchise workers, limit their employment opportunities, and prevent them from engaging in collective litigation. 139 Specifically, the FTC should ban noncompete clauses and class action waivers in employee contracts. These coercive contracts suppress wages, limit the formation of new firms, and limit worker mobility by disincentivizing workers from leaving abusive or unsafe work environments.
Employers currently bind millions of workers to these restrictive agreements. Scholars have determined that noncompetes bind roughly 20% of the labor force, and at least 40% have agreed to one in the past. A study by the Economic Policy Institute found that corporations have bound 60 million workers to mandatory arbitration agreements. In the past, Amazon imposed agreements that prohibited warehouse workers from accepting employment with any product or service competitor to Amazon for an astonishing 18 months. Although Amazon stopped this practice for its warehouse workers under public pressure, the corporation still uses noncompetes with its executives and technical professionals.

V. Conclusion

Amazon is one of the most dominant corporations in history. A fundamental aspect of its power is the corporation’s ability to surveil every aspect of its workers’ behavior and use the surveillance to create a harsh and dehumanizing working environment that produces a constant state of fear, as well as physical and mental anguish. The corporation’s extensive and pervasive surveillance practices deter workers from collectively organizing and harm their physical and mental health.

Amazon’s vast surveillance infrastructure constantly makes workers aware that every single movement they make is tracked and scrutinized. When workers make the slightest mistake, Amazon can use its surveillance infrastructure to terminate them.

Amazon’s conduct has provided a roadmap for other dominant corporations, such as Walmart, to implement similar surveillance practices. Amazon’s tactics ultimately seek to weaken the power of its workers and entrench its control over them.

Federal and state agencies, as well as legislatures, can enact several policies to prevent the implementation of invasive surveillance practices, restrain the market power of dominant corporations like Amazon, and invigorate unionization in the United States. Our solutions can create a new working environment in this country, an environment where workers have representation and bargaining power to determine their working conditions and protect their right to privacy and their right to collectively organize.
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